

INTERFACE EMULATION FOR STORAGE DEVICES

Michael Yatziv

5

ABSTRACT OF THE DISCLOSURE

10 An interface adapter is provided that allows a host device that communicates through a first interface protocol, such as a Fibre Channel compliant interface or a SCSI compliant interface, to connect to a plurality of storage devices that communicate through a second interface protocol, such as an IDE/ATA compliant interface. The interface adapter is configured to convert transmissions received from the host device to the second interface protocol and to convey the converted transmissions to the plurality of storage devices. The interface adapter is also configured to convert transmissions received according to the second interface protocol from the plurality of storage devices to the first interface protocol and to convey the converted transmissions to the host device. In this manner, the host device and the storage devices can accomplish input/output (I/O) transactions despite the fact that they implement different interface protocols. The interface adapter may allow IDE/ATA storage devices to be used in storage systems connected to host computer systems that communicate through a Fibre Channel compliant interface.

15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
105
110
115
120
125
130
135
140
145
150
155
160
165
170
175
180
185
190
195
200
205
210
215
220
225
230
235
240
245
250
255
260
265
270
275
280
285
290
295
300
305
310
315
320
325
330
335
340
345
350
355
360
365
370
375
380
385
390
395
400
405
410
415
420
425
430
435
440
445
450
455
460
465
470
475
480
485
490
495
500

25